

# 4<sup>th</sup> International Conference on SF<sub>6</sub> and the Environment

Marriott Rivercenter \* San Antonio, Texas \* November 28–30, 2006

# **Speaker Biographies**

# Bayo Adeniyi

Bayo Adeniyi has worked with the Nigerian electric utility company—the Power Holding Company of Nigeria PLC—since 1984. He is the manager for the Company Project Management Unit, which is responsible for the identification, preparation, and implementation of World Bank–funded projects in the Nigerian electric power sector. This includes the conversion of low-voltage electricity distribution systems to high-voltage electricity distribution system aimed at loss reduction in the electricity distribution network in selected clusters in Nigeria. Mr. Adeniyi participated actively in ERPA negotiation between the Nigeria utility, the Italian Carbon Fund, and the World Bank.

Prior to becoming the Manager for the Project Management Unit, Mr. Adeniyi worked in various capacities in the operations and maintenance of electric transmission facilities including high-voltage electric transmission equipment. He received his bachelor's degree in electrical and electronic engineering from the Obafemi University, Ile-Ife, Nigeria, and his M.B.A. from the University of Lagos, Lagos, Nigeria. Mr. Adeniyi is a registered engineer, a member of the Nigeria Society of Engineers, and a member of the Nigeria Institute of Management Consultants.

# **Lorinda Alms**

Lorinda Alms has worked in several different roles for Exelon for the last 17 years. She is currently a senior environmental specialist within Exelon Energy Delivery. In the Environmental Services Department, she has been responsible for various programs through the years (approximately 14 of 17 years) including general air quality compliance for the fossil-fueled stations. She is currently responsible for compliance guidance for the Exelon Energy Delivery Fleet (Air, PCB, SPCC, and  $SF_6$  programs). She has also been part of the fossil fuel power plant's technical staff for approximately 3 years, and is responsible for the general power plant technical support, the digital control system for the power plant (burner management updates and maintenance), and (as compliance specialist) the environmental, safety and industrial hygiene programs for the station.

Lorinda Alms is a graduate of the University of Missouri-Rolla, where she obtained a B.S. in mechanical engineering.

# **Mollie Averyt**

Ms. Averyt is an associate with ICF International in the Energy and Resources Practice. She has seven years of experience in environmental consulting under government contracts, with a focus on climate change and ozone depletion issues. Ms. Averyt has provided support for EPA's SF<sub>6</sub> Emission Reduction Partnership for Electric Power Systems for the past five years. Her support includes developing the Partnership's annual reports, providing technical support to Partners, supporting ongoing recruiting efforts, and keeping various communication materials up to date. Ms. Averyt received a B.S. degree in environmental science from the University of Vermont and is currently pursuing a master's degree in environmental science and policy at Johns Hopkins University.

### **Scott Bartos**

Scott Bartos has worked with EPA' Office of Atmospheric Programs since 1996. His accomplishments at EPA include creating the SF<sub>6</sub> Emission Reduction Partnership for the Magnesium Industry. As program manager, he has guided the magnesium industry to be the first to voluntarily commit to eliminating SF<sub>6</sub> emissions. Mr. Bartos also leads EPA's partnership with the electronics manufacturers (e.g., manufacturers of semiconductors, liquid crystal displays, and photovoltaics) to cooperatively identify and implement climate protection strategies. Scott recently led the Intergovernmental Panel on Climate Change's working group to revise the electronics industry's greenhouse gas emissions reporting guidelines.

Prior to joining EPA, Mr. Bartos served as a U.S. Peace Corps Volunteer with Thailand's Accelerated Rural Development Office. While in Thailand, he successfully developed rural freshwater fisheries, constructed integrated farm systems, and led local environmental education programs. Mr. Bartos has also conducted bioremediation studies and managed air monitoring programs for a private consulting firm. He received his B.S. in biology from James Madison University and completed a master's degree in environmental and natural resource policy at George Washington University.

# Seth Baruch

Seth Baruch is co-founder and managing partner of QualityTons (QT), one of the leading developers of greenhouse gas mitigation projects under the Clean Development Mechanism. QualityTons advises its clients on navigating the complicated process of generating carbon credits under the Kyoto and voluntary carbon trading markets. These services include project evaluation, baseline measurements, monitoring and verification protocols, and contract negotiation for the sale of carbon credits. QT's clients include power utilities, oil and gas companies, clean technology businesses, and financial institutions like the World Bank. QT drafted the first—and so far only—approved CDM methodology that deals with reducing  $SF_6$  emissions from the power sector, allowing power companies in the developing world to generate Certified Emission Reductions from  $SF_6$  mitigation activities.

Prior to founding QualityTons, Mr. Baruch was Deputy Director of International Programs at the Alliance to Save Energy, a non-profit based in Washington, D.C., that advocates for energy efficiency. Mr. Baruch managed the Alliance's efforts to promote energy efficiency in Eastern Europe, Russia, Ukraine, India, and various countries in Africa. Mr. Baruch holds a B.A. from Yale University and a master's degree from the London School of Economics.

### Jerome Blackman

Jerome Blackman is program manager for the U.S. EPA's SF<sub>6</sub> Emission Reduction Partnership for Electric Power Systems. Mr. Blackman joined EPA in 1995 and has work in several non-regulatory pollution prevention programs within the Office of Air and Radiation. As program manager, Mr. Blackman interacts with over 80 U.S. electric utilities that have voluntarily agreed to minimize SF<sub>6</sub> emissions via better management and handling procedures. Mr. Blackman has a degree in political science from Swarthmore College, and is an alumnus of the National Urban Fellows, Inc.'s Environmental Science and Management Program.

# **Holger Brandt**

Holger Brandt is president of Lunt Manufacturing Co., Inc., where he has been working since 1995. He has served in a variety of areas touching all aspects of the company. In 1988, he graduated from the University of Chicago with a bachelor's degree in physics; in the following year, he earned his M.B.A. concentrating in operation and production management.

# **Karan Capoor**

Mr. Karan Capoor has over fifteen years experience at the intersection of business and climate change policy. Mr. Capoor manages the World Bank's regional climate change and carbon finance activities for the Africa Region. He is co-author of the World Bank's annual "State & Trends of the Carbon Market", a leading carbon market publication. Mr. Capoor has an MBA from the University of Virginia 's Darden School

Mr. Capoor led PricewaterhouseCoopers' practice in climate risk management and strategy from 1999 until 2001. He was Global Business Development Manager for EnergyWorks, an energy project developer. Mr. Capoor participated in international climate negotiations from Rio until Kyoto, as a representative of Environmental Defense, an organization specializing in market-based solutions to environmental problems.

# **Cui Cheng**

Cui Cheng has worked with the Energy Research Institute since 1996. ERI is the only national institute supported by the central government that develops energy policy and strategy. As an associate professor and the deputy director of the Center for Energy, Environment and Climate Change Research, Dr. Cui's accomplishments at ERI include the China Initial National Communication Report, China National Program on Climate, as well as the China Environment Restrictions on Energy Development. Dr. Cui also works closely with the office of China National Climate Change Coordination Committee and some key industry sectors to prepare the Second National Communication Report on Climate Change, which included an SF<sub>6</sub> emission inventory.

Prior to joining ERI, Dr. Cui worked for the China Land Resource Ministry for environmental assessment research. He also works with the Resource Account and Pricing Policy Group of the China Committee of International Cooperation on Environment Development, where he contributes his expertise on environmental economic policy in transportation field. He received his B.S. in economic geography from Beijing Normal University and M.S. in environment assessment from same university. He received his Ph.D. from Peking University in environmental economics.

# **Roger Desaulniers**

Roger Desaulniers is the president and owner of Polycontrols Inc. The company manufactures a complete line of high-performance industrial gas mixers for the magnesium industry. Polycontrols specializes in gas flow metering and has a modern advanced gas flow metrology laboratory that can certify flow calibrations to NIST traceable standards.

A member of the International Magnesium Association, Polycontrols is active within the magnesium industry. The company has developed high-accuracy gas mixers to suit melt protection alternative processes for the magnesium primary producers, alloy suppliers, die casters, and recycle plants. Mr. Desaulniers graduated from University of Quebec and has 40 years of experience in industrial instrumentation and controls.

# **Sylvain Desaulniers**

Sylvain Desaulniers is the engineering manager at Polycontrols Technologies. In the last decade, he has developed one of North America's major flow calibration laboratories and he has led many projects related to flow applications.

He collaborated with the Alcan Research Center for the development of a new degassing gas mixing process. This process is now in operation in more than 125 aluminum foundries around the world. He is now working with the National Research Council of Canada to research plasma gas measurements.

In the magnesium industry, Sylvain has worked with the scientific community and has developed processes for the mixing of new magnesium melt protection alternatives such as the SO<sub>2</sub>, the Novec 612, and the AMT. Sylvain Desaulniers received his engineering degree from École Polytechnique of Montreal and an M.B.A. from the HEC.

### **Andrew Dessler**

Andrew Dessler is an environmental scientist who is actively engaged in research on both the science and politics of climate change. His scientific research revolves around climate feedbacks, in particular how water vapor and clouds act to amplify warming from the carbon dioxide that humans emit.

His interest in the politics of climate change comes from spending the last year of the Clinton administration as a senior policy analyst in the White House Office of Science and Technology Policy. Based on that experience, he coauthored a book, *The Science and Politics of Global Climate Change: A Guide to the Debate.* He is presently an associate professor in the Department of Atmospheric Sciences at Texas A&M University. His educational background includes a B.A. in physics from Rice University and a Ph.D. in chemistry from Harvard University. He also did postdoctoral work at NASA's Goddard Space Flight Center and spent nine years on the faculty of the University of Maryland. He is also an avid glider pilot—each flight puts his theoretical knowledge of the atmosphere to a concrete test.

# **Patrick Di Lillo**

Patrick Di Lillo is a technical specialist with Consolidated Edison Company of New York in the Equipment and Field Engineering Department. Mr. Di Lillo has extensive experience in specifying, evaluating, installing, maintaining, and conducting root cause failure analysis for high-voltage circuit breakers, switchgear, gas insulated substations, disconnect switches, and related substation equipment.

Mr. Di Lillo's work experience spans over 30 years and includes R&D and equipment design, electrical substation projects, substation automation, and standards participation. Prior to joining Consolidated Edison Company, Mr. Di Lillo was employed for nine years at American Electric Power Corporation. Mr. Di Lillo

received his B.E. in electrical engineering from Manhattan College.

# **Sherry Everett**

Sherry Everett holds a B.S. in polymer science from Penn State University and an M.B.A. from St. Joseph's University, and has completed postgraduate work in strategic planning at the University of Michigan. She has 22 years of experience working in various facets of the chemical and manufacturing industries including work as a research chemist, technical service associate, and product manager for a specialty gas company. From 1996 through the early part of 2006, she held the position of Director of Market Development in the Business Development Group for a large petroleum products manufacturer, where she was responsible for overseeing and profitably growing strategic industry business segments. Her work entailed researching and analyzing industry trends and developing business models as a result.

Sherry Everett is currently employed by Matheson Tri-Gas on a project contract basis. Her work in the last year has focused on doing a feasibility study for a new cover gas system for the magnesium industry trade, named MTG Shield.

# Ron Geib

Ron Geib has worked for Matheson Tri-Gas since 1996. His positions in the Specialty Gas Group have involved marketing product management and operations technical management positions. His current product marketing interests are gas standards for total sulfur in diesel fuels, environmental stack emissions, natural gas BTU standards, and presently the MTG shield magnesium melt protection system. His prior experience includes 11 years as a quality assurance manager and 11 years as chemical laboratory manager. He has a degree in biochemistry from Penn State University, and he is a Certified Quality Engineer.

# **Peter Glaubitz**

Peter Glaubitz studied electrical engineering at Hanover Technical University, graduating with honors in 1977. He then joined the production test field of the Siemens AG high-voltage  $SF_6$ -circuit breakers and switchgear factory, before moving to the commissioning department for high-voltage  $SF_6$ -switchgear and controlgear as well as high-voltage turnkey substations, where he was engaged in various projects worldwide. During this period his main focus was on high-voltage switchgear; he was appointed to introduce and optimize  $SF_6$ -handling procedures and  $SF_6$ -handling equipment for  $SF_6$  switchgear. This was followed by international factory operations for  $SF_6$  switchgear and head office activities as advisor for  $SF_6$ -switchgear projects and Regional Manager for high-voltage  $SF_6$ -switchgear projects. In 2001 he became Technical Director of Production of the Siemens high-voltage  $SF_6$ -switchgear factory in Berlin.

Mr. Glaubitz' work continues to focus on  $SF_6$  switchgear policy and application. He is a member of the Cigré WG B3.02  $SF_6$ -substations, within which he is the convenor of the working group on  $SF_6$ . In this function, he was the lead author of the  $SF_6$  working group that published the  $SF_6$  brochures " $SF_6$  Recycling Guide" and " $SF_6$  Handling Guide," and he is currently working on the " $SF_6$  Tightness Guide." He is also active in IEC and DKE (German Commission for Electrical, Electronic and Information).

### **Thomas Heckler**

Mr. Heckler graduated from the University of Applied Science Würzburg-Schweinfurt (Germany) in 1992. He soon joined Fuchs System Technik/Zippo working as a development engineer specializing in simulation of structural finite element calculations of electric arc furnaces. Mr. Heckler joined WIKA in 1995 as a product manager for diaphragm seals. In 1997 he became market segment manager for SF<sub>6</sub> gas density monitoring equipment. Since 2000, Mr. Heckler's responsibilities have grown to include leadership of WIKA's Global Center of Excellence in Gas Density Monitoring. In his position he is responsible for R&D, sales, marketing,

and manufacturing of the complete product line of gas density monitor equipment. Mr. Heckler works with switchgear makers around the world to develop and provide the best solutions for gas density monitoring.

### **Geoff Hewitt**

Geoff has spent his professional career in the analytical and environmental industry. Born in England, he studied chemistry with an emphasis on analytical chemistry at the Royal College of Advanced Technology in Salford, England, before undertaking post-graduate work in analytical chemistry under Dr. Frank Karasek at the University of Waterloo in Ontario, Canada. Geoff joined a fledgling HNU Systems in the mid-70s, first as a distributor and then as a direct employee. HNU introduced the first commercial handheld PID and went on to introduce a range of PID-based products. HNU was the leading company in the PID market for many years and Geoff, as VP of Sales and Marketing, played a key role in its growth. After a stint as CEO of an emerging technology company in the environmental sensor arena, Geoff returned to the PID marketplace in 2002, when he established ION Science (Americas) LLC for ION Science Ltd., a UK-based manufacturer of gas detection instruments including a range of PID units. See them at www.ionscience-americas.com.

### James Hillis

Jim Hillis is a Ph.D. chemist from North Carolina State University with extensive experience in magnesium research and development, dealing with metal quality, corrosion and finishing, and environmental, health, and safety issues. Prior to assuming his current position as Director of Technology with the WINCA Technology Group, Jim worked as a technical consultant and sole proprietor of Magnesium Quality Consulting following 27 years of service in magnesium customer service and development with Noranda Magnesium and The Dow Chemical Company. While at Noranda, he served as the chairman of the International Magnesium Association's "Committee for SF<sub>6</sub> and SO<sub>2</sub> Alternatives"; at Dow he played a lead role in the magnesium industry's development of high-purity die-cast alloys in the mid-80s.

### Tsutomu Ito

Tsutomu Ito has worked with the Japan Magnesium Association (JMA) as Technical Advisor since 2005 and is a member of their Environment and Safety Committee. Mr. Ito also has worked as a consultant for the Magnesium Society since 2005. Mr. Ito recently completed a study on the trend of  $SF_6$  reduction and alternatives in Europe, North America, and Japan.

Prior to joining JMA, from 1985 to 2005, Mr. Ito worked for Magnesium Market Development and Technical Service Activity at Morimura Bros. Inc., Japan, which was an agent for Hydro Magnesium, Magnesium Elektron Ltd., and Spectrulite Consortium in Magnesium business.

Prior to joining Morimura Bros., he worked at a magnesium smelting company (Furukawa Magnesium Co. Ltd.) as a technical and production manager. He was responsible for casting shop design, operation improvement of the Pigeon process, market chain development from alloy supply to scrap return, and high-quality alloy and casting process development. He also worked at the Research Institute of Mining and Smelting of Steel and Nonferrous Metals at Tohoku University for four years before joining Furukawa Magnesium, where his research focused on aluminum and magnesium smelting process. He received a B.S in chemistry from Yamagata University. He is also registered as Professional Engineer in Metals.

### **Lauren Jones**

Lauren Jones is the head of Greenhouse Gas Verification Services for Environment Canada; she has been involved with GHG validation, verification, and consulting for the past six years in both the public and private sectors. Lauren represented Australia on the ISO working groups on ISO14064 Part 3 and ISO14065 and is now a member of the Canadian working groups. In her role with Environment Canada, Lauren is charged with building GHG verification capacity in Canada, including the delivery of a 3½-day training course on using ISO14064:3.

Prior to her move to Canada, Lauren was integrally involved in the design and implementation of the New South Wales Greenhouse Gas Abatement Scheme (the world's first mandatory GHG emissions trading scheme). Her experience with the scheme involves the appointment of over 20 firms to conduct audits, performing over 40 second-party validations and managed numerous third-party validations and verifications. As a senior consultant with Ernst & Young, Lauren conducted third-party verifications and validations in the pulp and paper, manufacturing, energy, transportation, mining and telecommunications sectors. Lauren is also an experienced trainer, having taught for several years at the University of New South Wales (Sydney, Australia) and being the principal trainer to auditors under the NSW Scheme.

# **Dina Kruger**

Dina Kruger is Director of the Climate Change Division at the U.S. Environmental Protection Agency. Ms. Kruger is responsible for a wide range of programs and analyses dealing with climate change policy, economics, mitigation technologies, science and impacts, and communication. She directs EPA's domestic partnership programs on methane and fluorinated gases and the Methane to Markets Partnership, an international initiative aimed at the development of cost-effective methane recovery and use projects and involving developed and developing countries as well as the private sector. She also manages preparation of the U.S. National Inventory of Greenhouse Gases and Sinks, which is submitted annually to the United Nations Framework Convention on Climate Change, and has served as an elected member of the Intergovernmental Panel on Climate Change's Task Force Bureau on Greenhouse Gas Inventories since 1998.

Ms. Kruger joined EPA in 1989. Before that, she worked at ICF Consulting, the Investor Responsibility Research Center, and the Office of Technology Assessment. She holds a B.A. from the University of Washington, and received a master's degree from the Energy and Resources Group at the University of California, Berkeley.

# **Ching Huei Lu**

Ching Huei Lu has worked at Industrial Technology Research Institute for 14 years, where he has conducted various projects focused on environmental management, including the responsive measures of Montreal and Kyoto Protocol; abatement of PFCs, HFCs; and SF<sub>6</sub>; and cleaner production.

He now serves as a consultant for the Taiwan Semiconductor Industrial Association and Taiwan TFT-LCD Association. He is responsible for environmental safety and health for these two associations. Mr. Lu also heads up two relevant projects, "Taiwan EPA fluorinate GHG management" and "Taiwan Halon Management Center."

# Alfonso Lujan

Al Lujan is Senior Vice President for Energy Delivery Services at CPS Energy. In this role, Mr. Lujan directs the planning, design, construction, and maintenance of the electric and gas transmission and distribution systems for San Antonio's electric and natural gas utility. The New Mexico native is a graduate of the University of Albuquerque, as well as a graduate of the executive management program at the University of Michigan and Utility Management School at Baylor University. Mr. Lujan began his utility career in 1972 with the Public Service Company of New Mexico, where he supervised regional electric, gas, and water operations. He rose to Vice President of Electric Operations in 1982, during his last five years there, and served as Vice President of Statewide Electric Utility Operations. Mr. Lujan moved to Austin Energy in 2000 where he held the position of Senior Vice President and Chief Operating Officer. His civic involvement includes numerous positions in United Way campaigns and Economic Development activities, and he is the former (2006–2007) president of the Rocky Mountain Electrical League Foundation (RMEL), a 238-member organization comprising energy utilities, suppliers, and consultants. Mr. Lujan is also on the Board of Directors for Bexar Land Trust.

### Michael MacCracken

Michael MacCracken is Chief Scientist for Climate Change Programs with the Climate Institute in Washington, D.C. Mike graduated from Princeton University in 1964 and received his Ph.D. in applied science from the University of California Davis/Livermore in 1968; his research included consideration of the Arctic's possible role in driving glacial cycling. From 1968 to 1993, Mike conducted research on climate change and air pollution with the University of California's Lawrence Livermore National Laboratory (LLNL). From 1993 to 2002, he served as senior global change scientist with the interagency Office of the U.S. Global Change Research Program (USGCRP) in Washington D.C., also serving as the office's first executive director from 1993 to 1997 and as executive director of the USGCRP's National Assessment Coordination Office from 1997 to 2001. Since becoming affiliated with the Climate Institute in 2002, Mike has served on the integration team for the Arctic Climate Impact Assessment and participated in other assessment activities, including serving as review editor for the North America chapter of the Fourth Assessment Report of the Intergovernmental Panel on Climate change (IPCC). Mike is president (2003-2007) of the International Association of Meteorology and Atmospheric Sciences (IAMAS) and serves on the executive committees of the International Union of Geodesy and Geophysics (IUGG) and the Scientific Committee on Oceanic Research. He is also serving in a scientific expert group convened under the auspices of the United Nation's Commission on Sustainable Development and the scientific research society Sigma Xi that has been asked to suggest measures for mitigating and adapting to global climate change. He is a fellow of the American Association for the Advancement of Science (AAAS) and a member of the American Meteorological Society, the Oceanography Society, and the American Geophysical Union.

# **Georges Montillet**

Georges F. Montillet was born in Nice, France. He graduated from the Polytechnic Institute of Grenoble, France in 1968 with a M.S. in Power Electrical Engineering. In 1974 he obtained a MBA from NYU-Stern School of Business in New York, and a Doctorate in 2005 in Electrical Engineering. He joined Cogenel, New York, in 1971 after working on several projects in France, Algeria, and New York.

He was Executive Vice President of GEC ALSTHOM T&D in the USA, then Deputy General Manager of the ALSTOM US High-Voltage Switchgear; he is now with AREVA T&D on the Research & Technology Board. He is a senior member of IEEE High-Voltage Switchgear Committee and the High-Voltage Circuit Breaker Subcommittee. He is the IEEE chair of the PC37.06 working group and the chair of PC37.09 Cor. 1. He is also a member of CIGRE, SEE, the Society of Friends of Andre-Marie Ampere, and the Society of Industry Leaders.

# **Deborah Ottinger Schaefer**

Deborah Ottinger Schaefer has worked on EPA's programs to protect stratospheric ozone and climate since 1991. She currently manages the U.S. Emissions Inventory Program for HFCs, PFCs, and  $SF_6$  emitted from industrial processes, including manufacturing of aluminum, HCFC-22, semiconductors, electrical equipment, and magnesium, and use of electrical equipment. Estimates are included in the annual U.S. Inventory of Greenhouse Gases and Sinks and in National Communications. Recently, she served as lead author of the guidance for estimating emissions of  $SF_6$  from electrical equipment and other sources for the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. In 1999 and 2000, she worked with international experts to author and develop the IPCC Good Practice Guidance in National Greenhouse Gas Inventories for aluminum production, semiconductor manufacture, electrical transmission, and stationary refrigeration. In her previous position, she developed and implemented the National Recycling and Emissions Reduction Program, which requires recycling of ozone-depleting refrigerants and their substitutes. She received her M.A. from the University of Virginia and her B.A. from the College of William and Mary.

### **Newton Paciornik**

Newton Paciornik has worked with the General Coordination on Global Climate Change in the Ministry of Science and Technology of Brazil since 1997. His activities include the coordination of the Brazilian Inventory of Anthropogenic Emissions and Removals of Greenhouse Gases not included in the Montreal Protocol, part of the Brazilian National Communication to the UNFCCC. He participates in the UNFCCC meetings as a Brazilian delegate and in the work of the Intergovernmental Panel on Climate Change, having recently acted as coordinating lead author for Volume 1 (General Guidance and Reporting) of the 2006 IPCC Inventory Guidelines.

Prior to joining the Ministry of Science and Technology of Brazil, Dr. Paciornik worked at the energy planning department of ELETROBRAS, an electrical company in Brazil, for 25 years. He received his engineering degree from the Catholic University at Rio de Janeiro, Brazil, his M.Sc. in engineering from the University of California at Berkeley, and his Ph.D. in computer science from the University of Montreal in Canada.

### **Andrew Pankowski**

Andrew Pankowski is a Senior Policy Officer with the Ozone and Synthetic Gas Team within the Australian Government's Department of the Environment and Heritage (DEH). This team is responsible for developing and delivering policy and programs on ozone depleting substances, as well as for HFCs, PFCs, and SF<sub>6</sub>. Currently Andrew is working to secure the involvement of the Australian electricity supply industry in developing best practice guidelines for SF<sub>6</sub> management.

Andrew also develops and implements national strategies to progress Australia's phase-out of ozone depleting substances and to minimize emissions of ozone depleting substances and their synthetic greenhouse gas replacements.

Prior to joining DEH Andrew completed a Ph.D. in sea ice biogeochemistry at the University of Tasmania. He has participated in three research expeditions to the Antarctic, including a five-month stay at Australia's Casey Station, where he led a research project investigating coastal primary production.

# Friedrich Plöger

Friedrich Plöger is an electrical engineer and has worked for the Siemens Power Transmission and Distribution Group for 30 years. After five years as project manager for turnkey substations in the High-Voltage Division he moved to the Medium-Voltage Division, where he worked in different functions. He gained experience in main switching and insulation technologies as well as in the global market for transmission and distribution equipment. Presently he is working as senior engineer and consultant for the management of the division. Mr. Plöger is representing Siemens in national and European industry associations.

Regarding the climate change issue, he is member of the German working group on  $SF_6$  where manufacturers, utilities, and industrial users deal with all aspects linked to the application of  $T\&D-SF_6$  technology, e.g. developing, negotiating, and implementing the voluntary commitment. Further, he participated in the medium-voltage LCA study as well as the European Ecofys 2005 study, and he was nominated by the federal government to work as lead author for Chapter 8, Volume 3, of the new IPCC 2006 Guidelines.

# **Christopher Sherry**

Christopher Sherry serves at the New Jersey Department of Environmental Protection, Office of Policy, Planning and Science. Mr. Sherry is the lead New Jersey staff representative to the Regional Greenhouse Gas Initiative (RGGI) Staff Working Group (SWG), and is also a member of the SWG steering committee. He holds a Master of Environmental and Energy Policy degree from the University of Delaware.

# **Katie Smythe**

Katie Smythe received a B.S. in biology/environmental sciences from Salem College (NC). Ms. Smythe is a senior project manager and environmental analyst with 17 years of experience managing programs on global climate change, stratospheric ozone depletion, water resources, biodiversity, acid deposition, and risk assessment/risk communication. She has managed numerous research planning and assessment activities at the national and international level involving teams of leading experts. She also has designed, organized, and conducted numerous meetings, conferences, and workshops that build consensus on complex environmental issues.

Ms. Smythe joined the RAND Corporation in 1998, when the consulting firm Science & Policy Associates was acquired to form the RAND Environmental Science & Policy Center. For the past 12 years, she has served as the program administrator for a \$13 million research and assessment program on the environmental acceptability of alternative fluorocarbons and effects on stratospheric ozone depletion. She has been instrumental in establishing a new industry/government alliance to facilitate the reporting of greenhouse gas emissions specified under the U.N. Framework Convention on Climate Change—namely HFCs, SF<sub>6</sub>, and PFCs. She also helped organize a major conference for the Department of Energy on Key Issues that Will Shape our Energy Future. Overall, Ms. Smythe has managed projects for a broad range of clients, including several consortia of international chemical manufacturers, the electric utility industry, U.S. Environmental Protection Agency, U.S. Department of Energy, U.S. Coast Guard, Department of Defense/Strategic Environmental Research and Development Program, National Acid Precipitation Assessment Program, Dutch National Institute of Public Health and Environmental Protection, Electric Power Research Institute, as well as several states. Ms. Smythe has prepared more than 30 publications and reports for government and private sector clients.

# **Chad Tameling**

Chad Tameling is vice president at SET Environmental, Inc., where over the past 13 years he has held several positions including applications chemist in the forensic lab, compressed gas cylinder technician, Director of Operations for the Technical Field Services Division, emergency response coordinator/manager, and sales. He also developed SET's high hazard remediation team (on site decommissioning of high energy compounds and explosives).

Chad was a fire fighter with the Itasca Fire Protection District and a member of the MABAS Division 12 Hazardous Materials Team. He is a published author ("Field Identification and Decontamination of Toxins," published by Lexi-Comp, Inc.). Chad is currently working on a contribution to *Emergency Bioterrorism*, published by McGraw-Hill.

He is a graduate of Indiana University, where he obtained a B.S. in environmental science from the School of Public and Environmental Affairs in Bloomington.

# Kyoichi Uehara

Kyoichi Uehara has worked in the Power Transmission & Substation Engineering Department since 1977. He engaged in the development of  $SF_6$  Gas Insulated Transformer and GIS in the 1980s and '90s. Following that, he has been engaged in substation engineering and consulting with the customers of Japanese utilities. He is a member of JEMA (Japan Electrical Manufacturers' Association), IEEE, IEE of Japan, and CIGRE, and he has working knowledge of the Japanese voluntarily  $SF_6$  gas reduction program in JEMA.

Prior to joining Toshiba Corporation, Mr. Uehara received his B.S. in electrical engineering from Waseda University, Tokyo, Japan, in 1977.

# **Arnaud Viel**

Arnaud Viel joined the EcoSecurities™ main office in Oxford (UK) in 2005 as a project manager. He has successfully led a number of greenhouse gas emission reduction projects (mostly CDM and JI) from initial project idea to issuance of carbon credits in a wide range of sectors including cement and metal production, power generation, waste, and biomass. He is also responsible for the identification and development of new business opportunities in sectors with emissions of high global warming potential (GWP) gases, in particular electrical transmission and magnesium production (SF<sub>6</sub>) and semi-conductor manufacturing and aluminum production (PFCs).

Prior to joining EcoSecurities, Arnaud worked as a sustainable energy officer in Croydon Borough Council (London) where he advised on local renewable energy policies. He graduated as an engineer from the Ecole Polytechnique (Paris) and holds an M.Sc. in environmental technology from Imperial College (London). He is fluent in French (native), English, and Spanish.

# **Steve Willard**

Steve Willard currently manages product development for Avistar and PNMR's Center for Innovation and Technology where he is in charge of development of Avistar's wireless SF<sub>6</sub> monitoring system and heads a clean generation technology analysis group. He has over 22 years of experience in the energy industry in regulated and unregulated markets, holding engineering and program management positions at PNMR gas and electric utilities. He also served as product support manager for Honeywell Power Systems in addition serving overseas in the U.S. Peace Corps. Steve holds B.S.M.E. and M.B.A. degrees, both from the University of New Mexico, and is a licensed engineer in the state of New Mexico.

### Charles Woodburn

Charles Woodburn has worked at Meridian Magnesium Products of America since 1994, serving as the facilities engineer, recycling manager, ISO 14001 management rep, and maintenance manager. Meridian Technologies is an international producer of magnesium die castings for the automotive industry. Meridian was a founding member of the EPA's SF $_6$  Emission Reduction Partnership; Mr. Woodburn has served as a representative for Meridian in the Partnership since its inception. Meridian has facilities in Canada, the U.S., the U.K., Italy, and China. During this time he has implemented programs to track the amount of SF $_6$  used in the processing of magnesium die casting. These programs have reduced the amount of SF $_6$  used at Meridian's U.S. facility for processing castings by over 400%. Meridian currently has facilities in Canada and the U.K. running SO $_2$  cover gas systems. Mr. Woodburn is currently leading a team to convert to SO $_2$  at their U.S. facility in the first quarter of 2007.

# Will Wynn

Will Wynn was elected Austin's 50th Mayor in 2003 and re-elected in 2006.

A native Texan, Wynn attended Texas A&M University, graduating cum laude in 1984 with a degree in Environmental Design. He first moved "back" to Austin in 1981.

In March 2005, Mayor Wynn was among the 60 world leaders that signed the United Nations Urban Environmental Accords.

Earlier this year, Mayor Wynn and the city's local utility company, Austin Energy, kicked-off the Plug-In Partners coalition, a nationwide partnership that will lobby carmakers to build a new green vehicle — plug-in hybrids.

In addition to his many duties locally, Wynn has risen to a leadership position with the U.S. Conference of Mayors. He is the chair of the Energy Committee, and is member of the US Mayors Council on Climate Protection.

In October the Mayor moderated a panel discussion entitled "What Local Governments Are Doing" which addressed the progress of cities in making municipal buildings more energy-efficient and carbon neutral.

In November, Wynn addressed the 2nd annual Sundance Summit in Utah, a gathering of national political, corporate and environmental leaders, on Climate Protection. He was selected due to his leadership on the issue of climate protection and his efforts around clean energy technologies and the Plug-In Hybrid campaign.

Wynn has over 20 years of experience in the commercial real estate industry. He is a member of the Urban Land Institute and believes that only through dramatically better land use practices can Austin and the surrounding region appropriately deal with challenges like traffic, air quality, housing affordability and environmental protection.

Will was named was awarded Scenic Austin's first annual Scenic Hero Award; was named Energy Executive of the Year by the Association of Energy Engineers; and was recently named Local Public Official of the Year by the National Association of Social Workers.

# Takeshi Yamamoto

Takeshi Yamamoto currently works for the Federation of Electric Power Companies (FEPC) in Japan, as manager of its Engineering Department. He coordinates transmission and substation affairs among all the electric power companies in Japan.

He joined Japan's Chugoku Electric Power Co., Inc., and has 14 years of engineering experience in electric power system operation and planning. He received his B.S. in electrical engineering from Kyoto University in 1992.